



Age and Poverty as Risk Factors

A large part of the world's population has gained only marginal benefits from the overall improvement in prevention and therapy of diseases. In 1900, 25% of deaths occurred in people 65 years and older, whereas in 1980 this percentage was about 70% (1). From the point of view of economists, it is around age 50 that a balance point is reached where the benefits of a few more productive years are more or less equivalent to the added cost of surviving into old age (2). Beyond that age, the economic argument for prevention weakens considerably; the economic outcome tends to become negative with regard to preventive measures aimed at extending survival, and the cheapest patient may unfortunately appear to be the dead patient. Prevention of diseases and health care of people age 50 and older have to be discussed, therefore, in the context of a view of society based not only on economics but also on social and health equity and compassion.

Limited sectors of the world population have enjoyed the advantages of rapid expansion of industries, accompanied by dramatic reductions in infant mortality and mortality from infectious diseases, as well as a considerable extension of life span, but at the same time these sectors have experienced the disadvantage of increasing morbidity in older age groups. In particular, the extension of the life span has not coincided with an extension of the *active* life expectancy in the age group 65 and older (3). Because benefits are mainly expressed as decreased infant mortality (that nevertheless remains much higher than in industrialized countries), a greater proportion of individuals reach the age at which they have a higher risk of chronic degenerative diseases. The sanitation standards in industrialized countries are, as a whole, barely sufficient to satisfy the growing demand, and they are totally inadequate in developing countries. How will these countries be able to respond to the further increasing demand in the near future?

In spite of the overall impression of a strong trend toward general uniformity, we live in a dichotomized society in which certain socioeconomic disparities are not disappearing, and the differences between the rich and the poor, the haves and the have nots, are instead increasing. This is actually a worldwide phenomenon, as the socioeconomic disparities observed between industrialized and developing countries are to a certain extent comparable to those between the rich and the least-favored socioeconomic groups existing within even the most industrialized countries (4). The divergence between the haves and have nots will be reinforced by the growing proportion of old people, who are mostly have nots. The percentage of defenseless, and economically less favored, people is very high among the old, and most disabling diseases occur in old age. Being ill is more and more equivalent to being poor, as the proportion of people who can afford the best health care decreases. Not only is the risk of disease greater, but the chance of recovery is likely to become smaller among the poor than among the rich.

Life expectancy in poorer societies is much shorter than within affluent ones, but within affluent societies, old people, the proportion of whom continues to increase, have a considerably lower quality of life, approaching for some individuals the condition of absolute poverty. In other words, the poor are less likely to become old, while the old have a greater chance of becoming poor.

It is also of relevance that equal access to health services will contribute considerably to equity in health status, but equal access will not entirely achieve equity without interventions which must take

place at the level of the existing socioeconomic and cultural disparities. These are in most instances tenaciously rooted within the prevailing educational system, which tends to accentuate, rather than mitigate, disparities. This is not a matter of aiming at general cultural uniformity, but rather a matter of recognizing the human dignity of each individual. A pertinent example is the National Health Service instituted in the United Kingdom in 1940, which aimed to remedy inequities in health care as well as in health status. In spite of its clear success and the public and professional support it received, the National Health Service did not reduce the differences in mortality rates between the more and less-favored socioeconomic groups (5-7). Paradoxically, an initiative inspired by motivation for social and health equity somehow disregarded an essential component of public health: initiatives toward equity in health status must be established as a prerequisite to universal availability of services (8).

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REFERENCES

1. Brody JA, Schneider EL. Diseases and disorders of ageing: an hypothesis. *J Chronic Dis* 39:871-876 (1986).
2. Rose G. The strategy of preventive medicine. New York:Oxford University Press, 1992.
3. Brody JA. Prospects for an aging population. *Nature* 315:463-466 (1985).
4. Tomatis L. Poverty and cancer. *Cancer Epidemiol Biomarkers Prev* 1: 167-175 (1992).
5. Logan WPD. Cancer mortality by occupation and social class. IARC Scientific Publications no. 36. Lyon:International Agency for Research on Cancer, 1982.
6. Marmot MG, McDowall ME. Mortality decline and widening social inequalities. *Lancet* ii:274-276 (1986).
7. Kogovinas E. Longitudinal study: socio-demographic differences in cancer survival. London:Her Majesty's Stationery Office, 1990.
8. Susser M. Health as a human right: an epidemiologist's perspective on the public health. *Am J Public Health* 83:418-426 (1993).